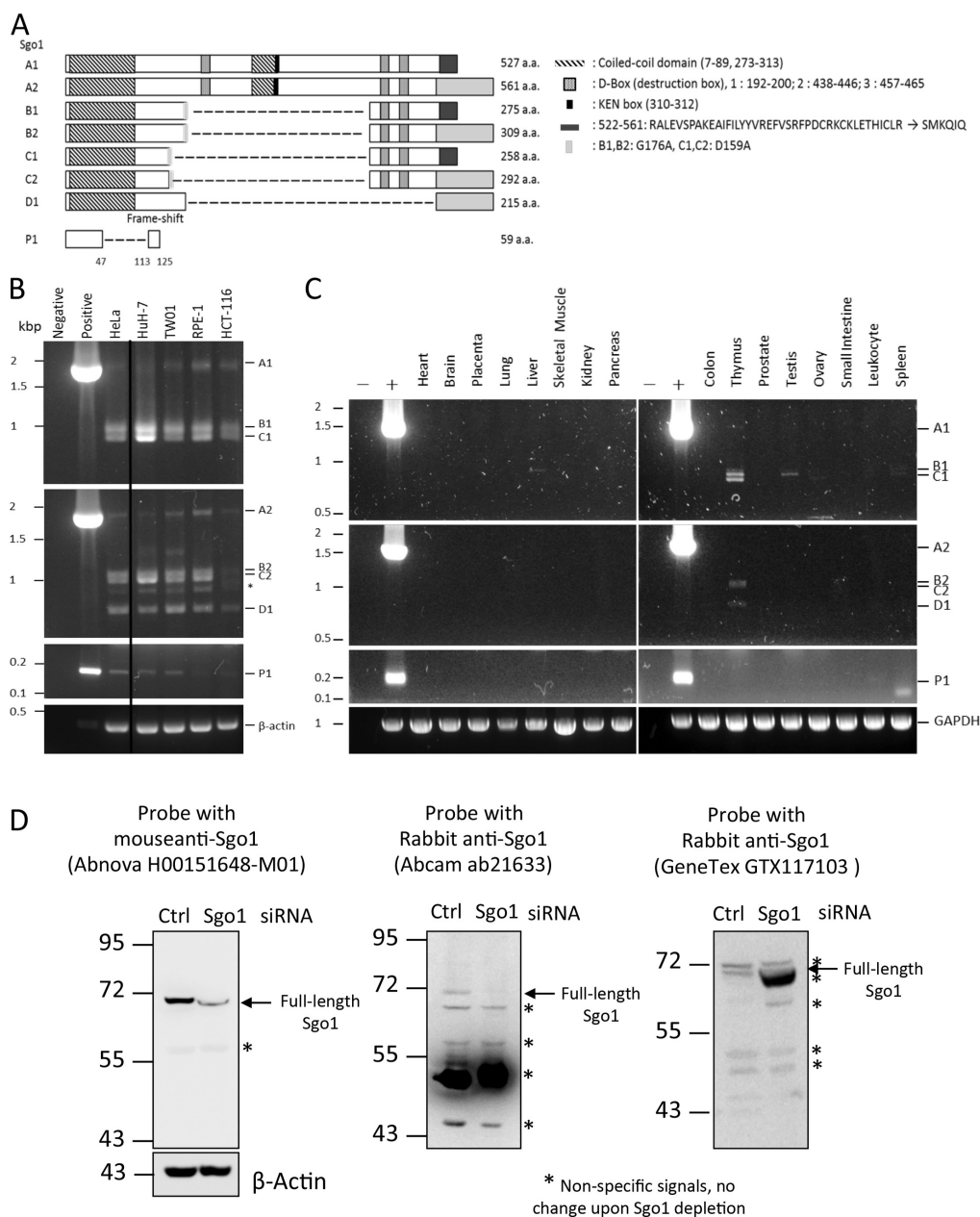


SUPPLEMENTARY FIGURE

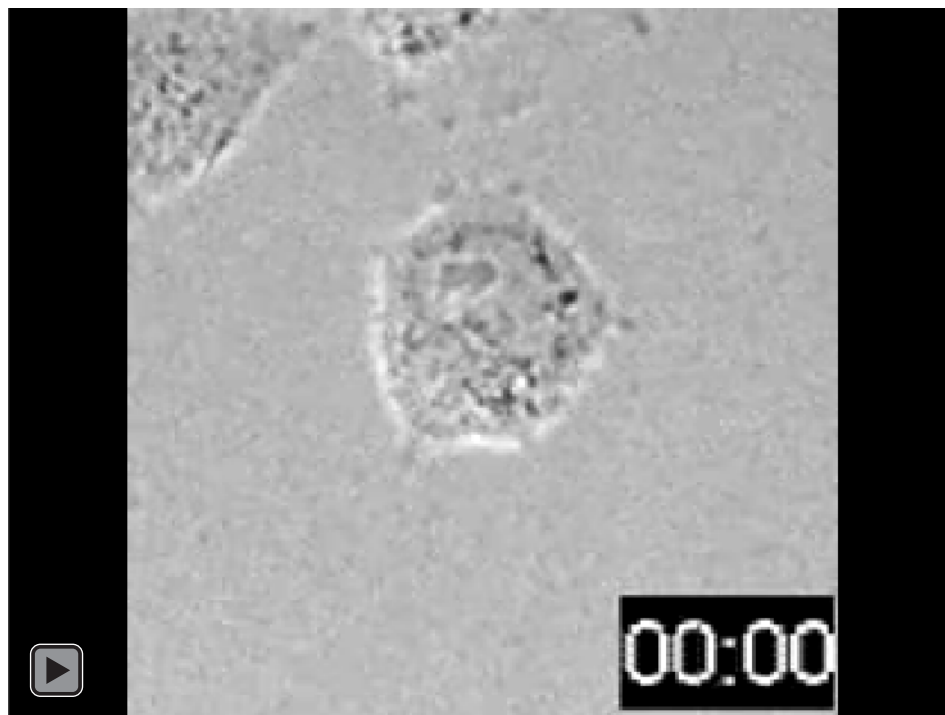


Supplementary Figure 1: Characterization for the expression of Sgo1 transcription splicing variants. (A) Scheme of Sgo1 splicing variants. Eight isoforms of Sgo1 were identified from database searches, including 2 full-length isoforms A1/A2 and 6 small variants B1/B2/C1/C2/D1/P1. (B) Three sets of specific primers were applied to detect various Sgo1 variants in HeLa, HuH-7, TW01, RPE-1, and HCT-116 cells by conventional RT-PCR. Most Sgo1 splicing variants were detected in these cell lines. (C) Multiple tissue cDNAs were amplified to detect different Sgo1 variants by RT-PCR. Sgo1 mRNA was only detected in thymus, testis, and spleen, with the majority being B1, B2, C1, and C2 variants. (D) Representative blots of HeLa cells depleted with control (Ctrl) and Sgo1. The same lysates were probed with three different antibodies, including Abnova (H00151648-M01), Abcam (ab21633) and GeneTex (GTX117103). Note that although various bands were detected in these blots, only the signal corresponding to 70 Kda was lost upon Sgo1 depletion. Thus, full-length Sgo1 is likely the only translated product of Sgo1 in HeLa cells. Similar results were observed in other cell lines (as shown in Figure 4A).

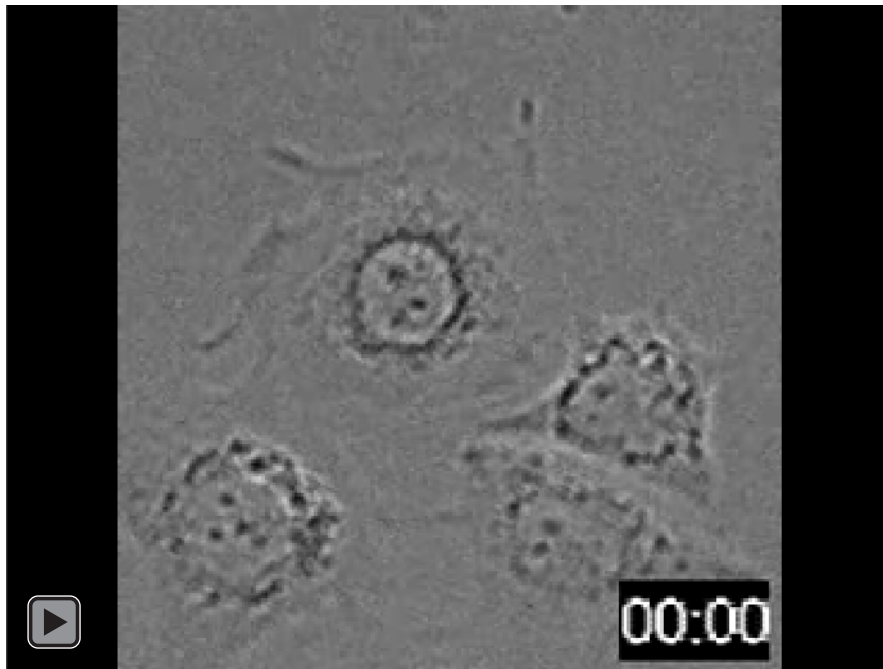
SUPPLEMENTARY VIDEO INFORMATION

Multi-dimensional time-lapse imaging was performed using a Leica DMI6000 inverted microscope equipped with an HCX PL FL 20x objective and an Andor Luca R EMCCD camera. Differential interference contrast

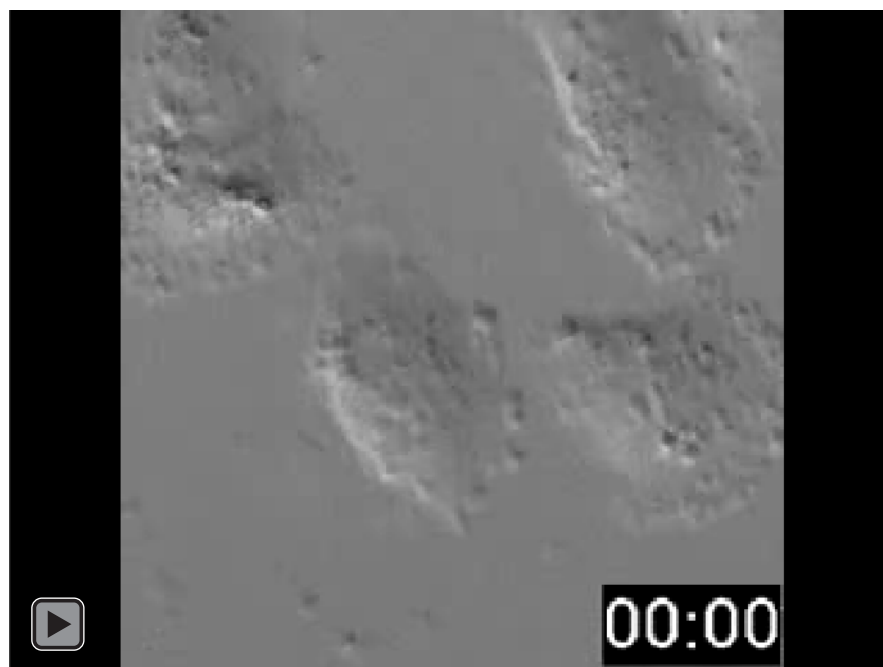
images were acquired for follow-up image analysis. Representative videos illustrating cells treated with either control or Sgo1-specific siRNA are provided as follows. Time stamps displayed as 00:00 for hr:min.



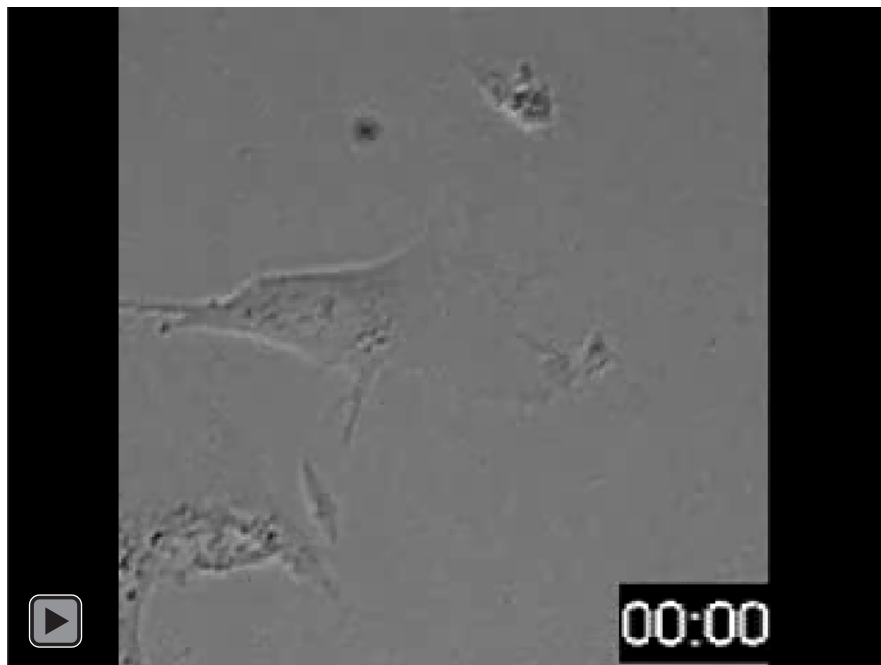
Supplementary Video S1: HeLa cells treated with Sgo1 siRNA.



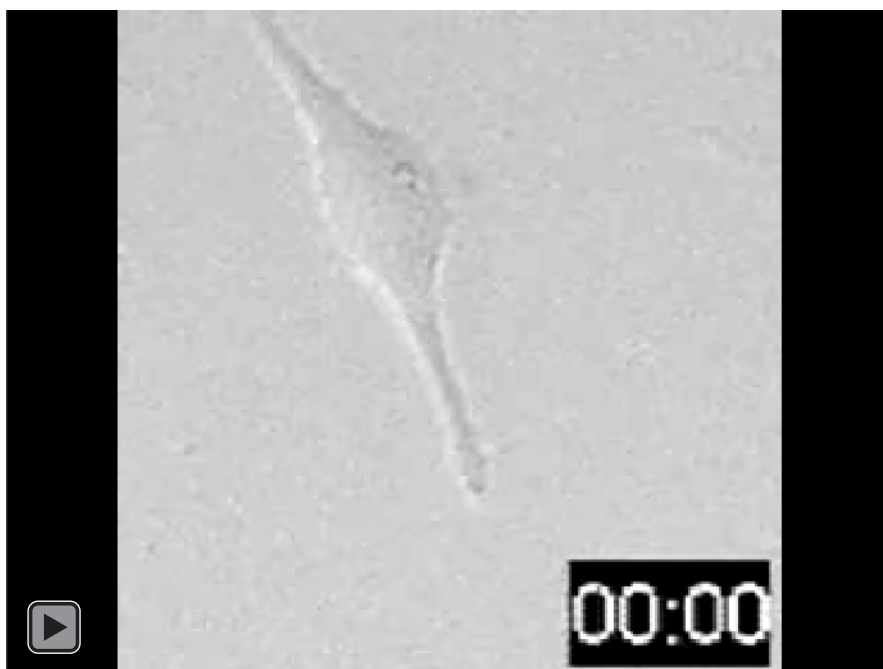
Supplementary Video S2: HuH-7 cells treated with control siRNA.



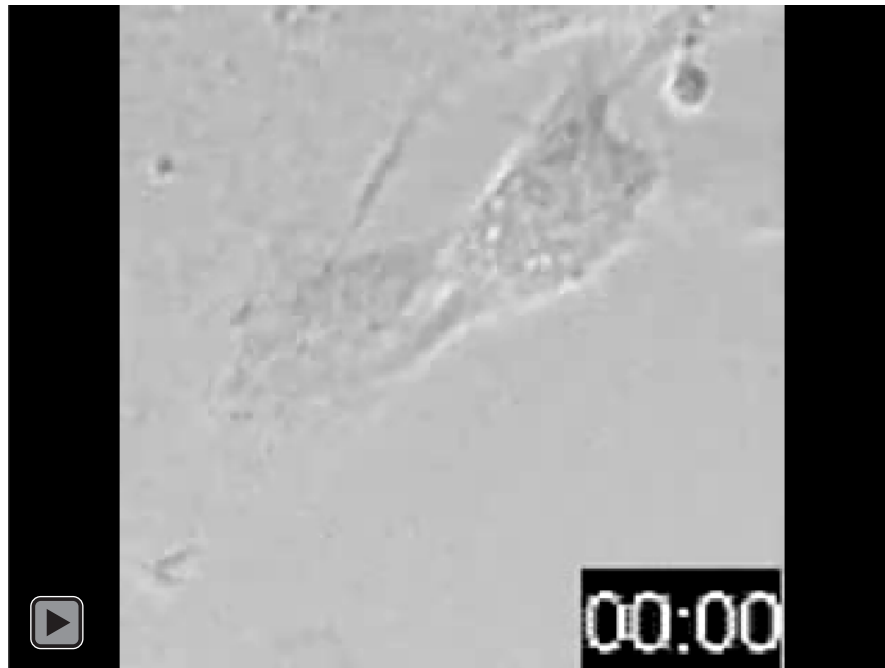
Supplementary Video S3: HuH-7 cells treated with Sgo1 siRNA.



Supplementary Video S4: NeHepLxHT cells treated with control siRNA.



Supplementary Video S5: NeHepLxHT cells treated with Sgo1 siRNA.



Supplementary Video S6: RPE-1 cells treated with Sgo1 siRNA.